Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 May 2001</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-3,5 and 7-22</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-3,5 and 7-22</u> is/are rejected.

7)☐ Claim(s) <u>4 and 6</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>08 May 2001</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>2</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

1.   The application filed on 5/8/2001 is with 22 claims. In this Office Action,

claims 1-22 are pending.

priority under 35 U.S.C. 119(a)

2.   Applicant is claiming the priority date under 35 U.S.C. 119(a) as this application

is a continuation-in-part of US Patent application S. No. 09/513812 filed on 2/25/2000,

which is based on the provisional application 60/142,209 filed on 7/2/1999. So, the

examiner honors the priority as per statutory law.

Drawings

3.   The drawings filed on 5/8/2001 are acceptable subject to correction of the

informalities indicated on the attached "Notice of Draftsperson's Patent Drawing

Review," PTO-948. In order to avoid abandonment of this application, correction is

required in reply to the Office action. The correction will not be held in abeyance.

Specification

4.   The use of the trademarks Microsoft™, has been noted in this application. It

should be capitalized wherever it appears and be accompanied by the generic

terminology.

Ex: **Microsoft** used on page 5, line 11.

Although the use of trademarks is permissible in patent applications, the

proprietary nature of the marks should be respected and every effort made to prevent

their use in any manner, which might adversely affect their validity as trademarks.

It is also necessary to specify the version when describing software in the

specification.

Appropriate correction is required. Please check the full document.

Claim Rejections - 35 USC § 112

5.   Claim 15 is objected for claiming both a computer storage media and a method in

a single claim. A single claim, which recites both an apparatus and the method steps of

using the apparatus, is indefinite under 35 U.S.C. 112, second paragraph. This type of

claim is indefinite because it fails to positively recite the boundaries sought for

protection. The metes and bounds of the claim cannot be determined because it is

unclear as to which category of subject matter is sought for protection, i.e., the method

or the apparatus.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> "A patent may not be obtained though the invention is not identically disclosed or described as set forth
>
> in section 102 of this title, if the differences between the subject matter sought to be patented and the
>
> prior art are such that the subject matter as a whole would have been obvious at the time the invention
>
> was made to As person having ordinary skill in the art to which said subject matter pertains.
>
> Patentability shall not be negatived by the manner in which the invention was made."

7.   Claims 1-2, 5, 7-22 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Knight (US Patent 6,126,330) and in view of Watson et al. (US Patent 6,631,409).

8.   As per independent claim 1, Knight discloses a computer system for dynamic

monitoring the objects of the application whenever user interacts with them (col. 3, lines

31-42). Knight teaches the claimed "dynamically identifying the objects of the specified

class" by displaying dynamic object identifiers in the set-up program resulting from the

user interaction with objects in the program. (col. 3, lines 31-42). Knight further teaches

the claimed step of "maintaining a list of the identified objects and the attribute values of

the identified objects over time" as sets of object identifiers listed in the object display

and notification events listed in event display for which the user/developer requires

feedback from the subsequent use of the application by the customer/end-user (Fig. 2,

col. 6, lines 39-43). Knight further teaches the claimed step of "identifying changes in

the maintained attribute values of each identified object over time" by disclosing that

while the application being used by the developer, all object identifiers corresponding to

lwindow objects within application are being changed, affected by or interacted with

developer/user are displayed (Fig.2, col. 6, lines 22-27). Finally, Knight teaches the

claimed "performing one or more functions in response to comparing and identifying

changes" (as in the current disclosure, functions include generating a notification, see

on page 12, lines 8-12) Notification events corresponding to the particular objects

identified in the object display area of the setup tool (Fig. 2, col. 6, lines 29-38). Knight

does not particularly teach the step of comparing attribute value with a threshold value.

However, Watson explicitly teaches the claimed step of "comparing at least one of the

attribute values of each identified object with a threshold value associated with at least

one of the attributes in the class" the database contains a list of class entries consisting

of status variables (i.e., objects), a minimum threshold value with a display rule. As per

his example, if the server object exceeds 75% percent of CPU utilization, the

corresponding object on MOM clients will appear red and flashing up until the user

selects the object for the detailed window (Fig. 7, col. 6, line 63 to col. 7, line 1). Thus, it

would have been obvious to one of ordinary skill in the art at the time of the invention to

incorporate comparison of objects values with threshold value. Watson's teaching of

comparison with threshold value would allow users of Knight's system to retrieve

objects that fall within a particular range/class.

9.   As per dependent claim 2, Knight teaches the claimed "the class represents at

least one process, thread, or mass storage device" objects identifiers corresponding to

lwindows objects are with in the application (i.e., process) (Fig. 2, col. 6, lines 22-27).

10.   As per dependent claim 5, Watson teaches the claimed "generating a notification

if an attribute value of a specific object exceeds the threshold value" the database

contains a list of class entries consisting of status variables (i.e., objects), a minimum

threshold value with a display rule. As per his example, if the server object exceeds

75% percent of CPU utilization, the corresponding object on MOM clients will appear

red and flashing up (i.e., notification) until the user selects the object for the detailed

window (Fig. 7, col. 6, line 63 to col. 7, line 1).

11.   As per dependent claim 7, Watson teaches the claimed "averaging attribute

values over the intervals as an indication of performance" many rules can be defined

such as attributes (Fig. 7, col. 7, lines 2-4). Watson also teaches how to display warning

and/or error messages to the GUI (col. 7, lines 5-7).

12.   As per dependent claim 8, Watson teaches the claimed "displaying the attribute

values to a user" many rules can be defined such as attributes like flashing, animation,

etc (Fig. 7, col. 7, lines 2-4). Watson also teaches how to display user with warning

and/or error messages to the GUI (col. 7, lines 5-7).

13.   As per dependent claim 9, Watson teaches the claimed "a user specifies the

threshold value for each of the attributes in the class" the threshold values are stored

on the database and form Watson example it clearly indicates that the values provided

by a user (Fig. 7, col. 6, line 63 to col. 7, line 1).

14.   As per dependent claim 10, Knight teaches the claimed "adding at least one of

the identified objects to the list, deleting at least one of the identified objects from the

list, and/or preserving the list" as the application is used by the developer, all object

identifiers corresponding to Iwindow objects within application being changed, affected

by or interacted with developer/user are displayed (Fig.2, col. 6, lines 22-27).

15.   As per dependent claim 11, Knight teaches the claimed "dynamically identifying

the objects includes limiting the amount of objects identified" displaying dynamic object

identifiers in the set-up program resulting from the user interaction with objects in the

program. (col. 3, lines 31-42). User/developer during the setup phase creates a monitor

input file (Fig. 1, col. 5, lines 49-53).

16.   As per dependent claim 12, Knight teaches the claimed "dynamically identifying

the objects occurs in response to a user request" displaying dynamic object identifiers

in the set-up program resulting from the user interaction with objects in the program.

(col. 3, lines 31-42). User/developer during the setup phase creates a monitor input file

(Fig. 1, col. 5, lines 49-53).

17.   As per dependent claim 13, Watson teaches the claimed "the objects are stored

in a database, wherein identifying occurs in response to an update to the database"

storage unit (600) contains several databases for a monitor server, object class

database (602), and object instances database (604) (Fig. 6, col. 5, lines 19-26).

18.   As per dependent claim 14, wherein the threshold value is associated with a

plurality of the attributes of the class" at Fig. 1, col. 2, lines 33-44.

19.   As per dependent claim 15, "One or more computer readable media having

computer-executable instructions for performing the method recited in claim 1" this

claim is rejected with the same reason as the claim 1 and additionally Knight teaches

the claimed step of "computer readable media" disclosed as computer program product

comprising computer usable medium having computer readable program code (col. 3,
line 59 to col. 4, line 1).

20.   As per independent claim 16, Knight discloses a computer system for dynamic
monitoring the objects of the application whenever user interacts with them (col. 3, lines
31-42). Knight teaches the claimed "an object identification component for dynamically
identifying the objects of the specified class" displaying dynamic object identifiers in the
set-up program resulting from the user interaction with objects in the program. (col. 3,
lines 31-42). Knight further teaches the claimed "a history component for identifying
changes in the attribute values of each identified object over time" as the application is
used by the developer, all object identifiers corresponding to lwindow objects within
application being changed, affected by or interacted with developer/user are displayed
(Fig.2, col. 6, lines 22-27). Finally, Knight teaches the claimed "As performance
component responsive to the comparison component and the history component for
performing one or more functions" (as in the current disclosure, functions include
generating a notification, see on page 12, lines 8-12). Notification events corresponding
to the particular objects identified in the object display area of the setup tool (Fig. 2, col.
6, lines 29-38). Knight does not particularly teach the step of comparing attribute value
with a threshold value. However, Watson explicitly teaches the claimed step of "a
comparison component for comparing at least one of the attribute values of each
identified object with a threshold value associated with at least one of the attributes in
the class" the database contains a list of class entries consisting of status variables (i.e.,
objects), a minimum threshold value with a display rule. As per his example, if the

server object exceeds 75% percent of CPU utilization, the corresponding object on

MOM clients will appear red and flashing up until the user selects the object for the

detailed window (Fig. 7, col. 6, line 63 to col. 7, line 1). Thus, it would have been

obvious to one of ordinary skill in the art at the time of the invention to incorporate

comparison of objects values with threshold value. Watson's teaching of comparison

with threshold value would allow users of Knight's system to retrieve objects that fall

within a particular range/class.

21.   As per dependent claim 17, Knight teaches the claimed "the history component

comprises an object maintenance component for maintaining a list of the identified

objects and the attribute values of the identified objects" sets of object identifiers listed

in the object display and notification events listed in event display for which the

user/developer requires feedback from the subsequent use of the application by the

customer/end-user (Fig. 2, col. 6, lines 39-43).

22.   As per dependent claim 18, Knight teaches the claimed "the object identification

component includes computer-executable instructions for identifying all the objects of

the specified class" objects identifiers corresponding to Iwindows objects are with in the

application (i.e., process) (Fig. 2, col. 6, lines 22-27).

23.   As per dependent claim 19, Knight teaches the claimed "the identification

component includes computer-executable instructions for limiting the amount of objects

identified" displaying dynamic object identifiers in the set-up program resulting from the

user interaction with objects in the program. (col. 3, lines 31-42). User/developer during

the setup phase creates a monitor input file (Fig. 1, col. 5, lines 49-53).

24.   As per independent claim 20, Knight discloses a computer system for dynamic

monitoring the objects of the application whenever user interacts with them (col. 3, lines

31-42). Knight teaches the claimed "means for dynamically identifying the objects of the

class" displaying dynamic object identifiers in the set-up program resulting from the user

interaction with objects in the program. (col. 3, lines 31-42). User/developer during the

setup phase creates a monitor input file (Fig. 1, col. 5, lines 49-53). Knight further

teaches the claimed "means for maintaining a list of the identified objects and the

attribute values of the identified objects over time" sets of object identifiers listed in the

object display and notification events listed in event display for which the user/developer

requires feedback from the subsequent use of the application by the customer/end-user

(Fig. 2, col. 6, lines 39-43). Knight further teaches the claimed "means for identifying

changes in the maintained attribute values of each identified object over time" as the

application is used by the developer, all object identifiers corresponding to Iwindow

objects within application being changed, affected by or interacted with developer/user

are displayed (Fig.2, col. 6, lines 22-27). Finally, Knight teaches the claimed "means for

performing one or more functions in response to said means for comparing and said

means for identifying changes" (as in the current disclosure, functions include

generating a notification, see on page 12, lines 8-12) Notification events corresponding

to the particular objects identified in the object display area of the setup tool (Fig. 2, col.

6, lines 29-38). Knight does not particularly teach the step of comparing attribute value

with a threshold value. However, Watson explicitly teaches the claimed step of "means

for comparing at least one of the attribute values of each identified object with a

threshold value associated with at least one of the attributes in the class" the database

contains a list of class entries consisting of status variables (i.e., objects), a minimum

threshold value with a display rule. As per his example, if the server object exceeds

75% percent of CPU utilization, the corresponding object on MOM clients will appear

red and flashing up until the user selects the object for the detailed window (Fig. 7, col.

6, line 63 to col. 7, line 1). Thus, it would have been obvious to one of ordinary skill in

the art at the time of the invention to incorporate comparison of objects values with

threshold value. Watson's teaching of comparison with threshold value would allow

users of Knight's system to retrieve objects that fall within a particular range/class.

25.   As per dependent claim 21, Knight teaches the claimed "the means for

maintaining include an array in an application" sets of object identifiers listed in object

display area (15) are in the form of an array (Fig. 2, col. 6, lines 39-43).

26.   As per dependent claim 22, Knight teaches the claimed "means for specifying the

class, wherein said means for specifying include a graphical user interface or a textual

user interface" an application program that has been created by the use of functions

and capabilities of the VisualAge product (GUI) and a setup tool (Fig. 2, col. 5, line 64 to

col. 6, line 4).

27.   Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knight

(US Patent 6,126,330), in view of Watson et al. (US Patent 6,631,409) as applied to the

rejection of claim 1 and in view of Lumelsky et al. (US Patent 6,466,980).

28.   As per dependent claim 3, Knight and Watson do not explicitly teach available

space, capacity of mass storage media. However, Lumelsky teaches the claimed "the

class represents a mass storage device and the attributes include a free space attribute,

a capacity attribute, and a description attribute" the global server provides a spare,

shared and available capacity (col. 6, lines 33-39). Lumelsky also teaches resource

monitoring enables the controller to determine aggregate oriented attributes such as

utilization/willingness state of server as well as its capacity (col. 17, lines 45-53). Thus,

it would have been obvious to one of ordinary skill in the art at the time of the invention

to incorporate comparison of objects values with threshold value. Knight, Watson and

Lumelsky teach monitoring objects of an application and they are combined to relate

monitoring attributes of storage capacity. In order to do better resource management is

needed for distributed resources, on demand, shape system capacity (col. 6, lines 5-9).

Allowable Subject Matter

Claims 4 and 6 are objected to as being dependent upon a rejected base claim, but

would be allowable if rewritten in independent form including all of the limitations of the

base claim and any intervening claims. Prior art of record fails to teach claims 4 and 6.

Conclusion

29.   The prior art made of record, listed on form PTO-892, and not relied upon, if any,

is considered pertinent to applicant's disclosure.

30.   If a reference indicated, as being mailed on PTO-FORM 892 has not been

enclosed in this action, please contact Lisa Craney whose telephone number is (703)

305-9601 for faster service.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Sathyanarayan Pannala whose telephone number is

(703) 305-3390. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Breene can be reached on (703) 305-9790. The fax phone number for

the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov.

Should you have questions on access to the Private PAIR system, contact the

Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sathyaharayan Pannala
Examiner
Art Unit 2177

srp
March 17, 2004

GRETA ROBINSON
PRIMARY EXAMINER